

LISTING OF CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application.

1. (original) A magnetic pigment flake, comprising:

a central magnetic layer having a first major surface, an opposing second major surface, and at least one side surface;

a first reflector layer on the first major surface of the magnetic layer; and

a second reflector layer on the second major surface of the magnetic layer;

wherein the pigment flake exhibits a reflectivity corresponding to the reflectivity of the reflector layers and exhibits magnetic characteristics based on the relative magnetism of the magnetic layer.

2. (original) The pigment flake of claim 1, wherein the first and second reflector layers are on each of the first and second major surfaces but not on the at least one side surface of the magnetic layer.

Claims 3-6 (cancelled)

3.
7. (original) The pigment flake of claim 1, wherein the first and second reflector layers form part of a contiguous reflecting layer substantially surrounding the magnetic layer.

Claims 8 and 9 (cancelled)

~~10.~~⁴ (original) The pigment flake of claim 1, wherein the magnetic layer comprises a soft magnetic material.

~~11.~~⁵ (original) The flake of claim 1, wherein the magnetic layer is composed of a material with a coercivity of less than about 2000 Oe.

~~12.~~⁶ (original) The flake of claim 1, wherein the magnetic layer is composed of a material with a coercivity of less than about 300 Oe.

~~13.~~⁷ (original) The pigment flake of claim 1, wherein the magnetic layer comprises a material selected from the group consisting of iron, nickel, cobalt, iron, gadolinium, terbium, dysprosium, erbium, and alloys or oxides thereof.

~~14.~~⁸ (original) The pigment flake of claim 1, wherein the magnetic layer comprises a material selected from the group consisting of Fe/Si, Fe/Ni, FeCo, Fe/Ni/Mo, and combinations thereof.

~~15.~~⁹ (original) The pigment flake of claim 1, wherein the magnetic layer comprises a hard magnetic material.

~~16.~~¹⁰ (original) The pigment flake of claim 1, wherein the magnetic layer comprises a material selected from the group consisting of SmCo₅, NdCo₅, Sm₂Co₁₇, Nd₂Fe₁₄B, TbFe₂, and combinations thereof.

~~17.~~¹¹ (original) The pigment flake of claim 1, wherein the magnetic layer comprises a material selected from the group consisting of Fe₃O₄, NiFe₂O₄, MnFe₂O₄, CoFe₂O₄, YIG, GdIG, and combinations thereof.

~~18.~~¹² (original) The pigment flake of claim 1, wherein the magnetic layer has a physical thickness of about 200 Å to about 10,000 Å.

~~19.~~¹³ (original) The pigment flake of claim 1, wherein the reflector layers comprise a reflective material selected from the group consisting of aluminum, silver, copper, gold, platinum, tin, titanium, palladium, nickel, cobalt, rhodium, niobium, chromium, and combinations or alloys thereof.

~~20.~~¹⁴ (original) The pigment flake of claim 1, wherein the reflector layers each have a physical thickness of about 400 Å to about 2,000 Å.

¹⁵
~~21.~~ (original) A magnetic colorant composition, comprising:

a pigment medium; and

a plurality of pigment flakes dispersed in the pigment medium, the pigment flakes having a multilayer structure substantially the same as the pigment flake defined in claim 1.

¹⁶
~~22.~~ (original) The colorant composition of claim ¹⁵~~21~~, wherein the pigment medium comprises a material selected from the group consisting of acrylic melamine, urethanes, polyesters, vinyl resins, acrylates, methyl methacrylate, ABS resins, epoxies, styrenes, ink and paint formulations based on alkyd resins, and mixtures thereof.

Claims 23-131 (cancelled)